AMENDMENTS TO THE CLAIMS

Please amend claims 1 – 13 and 16 – 20 such that the status of the claims is as follows:

1. [Currently Amended] A gas purging block for use with injection molding and die casting systems, the block ~~system~~ comprising:

a first-side block having:

a first-side inner surface;

a first-side upper surface and a first-side lower surface; and

a pair of first-side channels extending through the first-side block parallel to the first-side inner surface,

wherein the channels are proximal the first-side inner surface such that cooling fluid is circulatable in the channels to facilitate heat transfer from the first-side inner surface;

wherein the channels extend from the upper surface to the lower surface such that fasteners can be extended through the channels such that the first-side block can be mounted in a first configuration;

such that the channels are ~~and~~ adapted to selectively function as conduits for cooling fluid and as mounting bores for mounting the first-side block to a first holder block, and

a second-side block having a second-side inner surface adapted to engage with the first-side inner surface to define a gas passageway.

2. [Currently Amended] The gas purging block of claim 1, wherein the first-side block further comprises a first-side outer surface parallel to the first-side inner surface, wherein the first-side outer surface comprises a plurality of outer-surface mounting bores for mounting the first-side block to the first holder block in a second configuration.

3. [Currently Amended] The gas purging block of claim 1, wherein the first-side block further comprises:

a first-side pair of side surfaces between the upper and lower surfaces; and

a first-side cross-coolant channel interconnecting ~~the~~ a first channel and a ~~the~~ second channel of the pair of first-side channels; and

wherein the cross-coolant channel extends from one of the first-side side surfaces.

4. [Currently Amended] The gas purging block of claim 3,

wherein the first-side block further comprises a first-side outer surface parallel to the first-side inner surface, and

wherein the first-side outer surface comprises a plurality of outer-surface mounting bores for mounting the first-side block to the first holder block in a second configuration.

5. [Currently Amended] The gas purging block of claim 1, wherein the first-side block further ~~comprising~~ comprises an alignment key for aligning the first-side block when mounted to the first holder block.

6. [Currently Amended] The gas purging block of claim 1, wherein the second-side block further comprises:

a pair of second-side channels extending through the second-side block parallel to the second-side inner surface,

a second-side upper surface and a second-side lower surface;

wherein the channels are proximal the second-side inner surface such that cooling fluid is circulatable in the channels to facilitate heat transfer from the second-side inner surface; and

wherein the channels extend from the upper surface to the lower surface such that fasteners can be extended through the channels such that the second-side block can be mounted in a first configuration;

~~and~~ such that the second-side channels are adapted to selectively function as conduits for cooling fluid and as mounting bores for mounting the second-side block to a second holder block.

7. [Currently Amended] The gas purging block of claim 6,

wherein the first-side block further comprises a first-side outer surface parallel to the first-side inner surface,

wherein the first-side outer surface comprises a plurality of outer-surface mounting bores for mounting the first-side block to the first holder block in a second configuration,

wherein the second-side block further comprises a second-side outer surface parallel to the second-side inner surface, and

wherein the second-side outer surface comprises a plurality of outer-surface mounting bores for mounting the second-side block to the second holder block in a second configuration.

8. [Currently Amended] The gas purging block of claim 6, wherein the first-side block further comprises:

a first-side pair of side surfaces between the first-side upper and lower surfaces;

a first-side cross-coolant channel interconnecting the pair of first-side channels extending from one of the first-side side surfaces, and

wherein the second-side block further comprises a second-side pair of side surfaces between the second-side upper and lower surfaces; and

a second-side cross-coolant channel interconnecting the pair of second-side channels extending form one of the second-side side surfaces.

9. [Currently Amended] The gas purging block of claim 8,

wherein the first-side block further comprises a first-side outer surface parallel to the first-side inner surface,

wherein the first-side outer surface comprises a plurality of outer-surface mounting bores for mounting the first-side block to the first holder block in a second configuration,

wherein the second-side block further comprises a second-side outer surface parallel to the second-side inner surface, and

wherein the second-side outer surface comprises a plurality of outer-surface mounting bores for mounting the second-side block to the second holder block in a second configuration.

10. [Currently Amended] A gas purging block for use with injection molding and die casting systems comprising:

a stationary-side block comprising:

a stationary-side heat exchanging surface adapted to cool excess injected material;

stationary-side upper and lower surfaces;

a first stationary-side channel extending through the stationary-side block; and

a second stationary-side channel extending through the stationary-side block parallel to the first stationary-side channel;

wherein the first and second stationary-side channels are proximal the stationary-side heat exchanging surface such that cooling fluid is circulatable in the first and second stationary-side channels to improve heat transfer;

wherein the first and second stationary-side channels extend from the stationary-side upper surface to the stationary-side lower surface such that fasteners can be extended through the first and second stationary-side channels such that the stationary-side block can be mounted in a first configuration; and

wherein the first stationary-side channel and the second stationary-side channel are adapted to selectively function as conduits for cooling fluid and as mounting bores for mounting the stationary-side block to a first holder block; and

an ejector-side block adapted to engage with the stationary-side block, comprising:

an ejector-side heat exchanging surface adapted to engage with the a stationary-side heat exchanging surface to define a gas passageway, and further adapted to cool the excess injected material;

ejector-side upper and lower surfaces;

a first ejector-side channel extending through the ejector-side block; and

a second ejector-side channel extending through the ejector-side block parallel to the first ejector-side channel;

wherein the first and second ejector-side channels are proximal the ejector-side heat exchanging surface such that cooling fluid is circulatable in the first and second ejector-side channels to improve heat transfer;

wherein the first and second ejector-side channels extend from the ejector-side upper surface to the ejector-side lower surface such that fasteners can be extended through the ejector-side channels such that the ejector-side block can be mounted in a first configuration; and

wherein the first ejector-side channel and the second ejector-side channel are adapted to selectively function as conduits for cooling fluid and as mounting bores for mounting the ejector-side block to a second holder block.

11. [Currently Amended] The gas purging block of claim 10,

wherein the stationary-side block further comprises a plurality of outer-surface mounting bores generally perpendicular to the stationary-side heat exchanging surface for further mounting the stationary-side block to the first die block in a second configuration, and

wherein the ejector-side block further comprises a plurality of outer-surface mounting bores generally perpendicular to the ejector-side heat exchanging surface for securing the ejector-side block to the second die block in a second configuration.

12. [Currently Amended] The gas purging block of claim 10,

wherein the stationary-side block further comprises a stationary-side cross-coolant channel extending from a side

surface of the stationary-side block and interconnecting the first stationary-side channel and the second stationary-side channel, and

wherein the ejector-side block further comprises an ejector-side cross-coolant channel extending from a side surface of the ejector-side block and interconnecting the first ejector-side channel and the second ejector-side channel.

13. [Currently Amended] The gas purging block of claim 12,

wherein the stationary-side block further comprises a plurality of outer-surface mounting bores generally perpendicular to the stationary-side heat exchanging surface for further mounting the stationary-side block to the first die block in a second configuration, and

wherein the ejector-side block further comprises a plurality of outer-surface mounting bores generally perpendicular to the ejector-side heat exchanging surface for securing the ejector-side block to the second die block in a second configuration.

14. [Original] The gas purging block of claim 11, wherein the stationary-side block further comprises a stationary-side alignment key for aligning the stationary-side block when mounted to the first holder block, and wherein the ejector-side block further comprises an ejector-side alignment key for aligning the ejector-side block when mounted to the second holder block.

15. [Original] The gas purging block of claim 10, wherein the block system is adapted to alternatively function as a vacuum block and a vent block.

16. [Currently Amended] A gas purging block for use with injection molding and die casting systems, comprising:

a stationary-side block comprising:

a stationary-side inner surface;

a stationary-side outer surface parallel to the stationary-side inner surface;

a pair of stationary-side coolant fluid channels extending completely through the stationary-side block ~~between~~ adjacent the stationary-side inner surface ~~and stationary-side outer surface~~ such that cooling fluid is circulatable in the pair of channels to facilitate heat transfer from the stationary-side inner surface; and

a first stationary-side mounting means for mounting the stationary-side block to a first holder

block; and

an ejector-side block comprising:

an ejector-side inner surface, adapted to engage with the stationary-side inner surface to define a gas passageway;

an ejector-side outer surface parallel to the ejector-side inner surface;

a pair of ejector-side coolant fluid channels extending completely through the ejector-side block ~~between~~ adjacent the ejector-side inner ~~surface and the ejector-side outer surface~~ such that cooling fluid is circulatable in the pair of channels to facilitate heat transfer from the ejector-side inner surface; and

a first ~~an~~ ejector-side mounting means for mounting the ejector-side block to a second holder block.

17. [Currently Amended] The gas purging block of claim 16, wherein the first stationary-side mounting means comprises fasteners adapted to be inserted through the pair of stationary-side coolant fluid channels, and wherein the first ejector-side mounting means comprises fasteners adapted to be inserted through the pair of ejector-side coolant fluid channels.

18. [Currently Amended] The gas purging block of claim 16, ~~wherein the~~ and further comprising:

a second stationary-side mounting means ~~comprises~~ comprising a plurality of stationary-side bores ~~fasteners adapted to be inserted~~ into the stationary-side outer surface, and ~~wherein the~~

a second ejector-side mounting means ~~comprises~~ comprising a plurality of ejector-side bores ~~fasteners adapted to be inserted~~ into the ejector-side outer surface.

19. [Currently Amended] The gas purging block of claim 18, wherein the second stationary-side mounting means comprises fasteners adapted to be inserted through the ~~pair of stationary-side coolant fluid channels~~ plurality of stationary-side bores, and wherein the ejector-side mounting means comprises fasteners adapted to be inserted through the plurality of ejector-side bores ~~pair of ejector-side coolant fluid channels~~.

20. [Currently Amended] The gas purging block of claim 19, wherein the stationary-side block further comprises a stationary-side cross-coolant channel extending from a side surface of the stationary-block and interconnecting the pair of stationary-side coolant fluid channels, and wherein the ejector-side block further comprises an ejector-side

cross-coolant channel extending from a side surface of the ejector-side block and interconnecting the pair of ejector-side coolant fluid channels.